APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,347	11/25/2003	Osamu Azami	04995/129001	4741

22511   7590   05/05/2010
OSHA LIANG L.L.P.
TWO HOUSTON CENTER
909 FANNIN, SUITE 3500
HOUSTON, TX 77010

EXAMINER
RUDOLPH, VINCENT M

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
05/05/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@oshaliang.com
buta@oshaliang.com

	Application No.	Applicant(s)
Office Action Summary	10/722,347	AZAMI, OSAMU
	Examiner	Art Unit	
	Vincent Rudolph	2625	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>23 March 2010</u>.

2a) ☒ This action is FINAL.　　2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,2,4,5,7 and 8</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,2,4,5,7 and 8</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>25 November 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　a) ☒ All　b) ☐ Some * c) ☐ None of:

　　1. ☒ Certified copies of the priority documents have been received.

　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kataoka ('165) in view of Simpson (Pub. # 20020066989) and Beaudet ('795).

Regarding claim 1, Kataoka ('165) discloses a digital multiple function processing

machine (**See Figure 1**) that includes an image data supply unit (scanner, **See Figure

1, Element 15**), an operation unit (control panel, **See Figure 1, Element 13**), and a

printer (**See Figure 1, Element 16**), such that the image data supply unit can execute

image data transmission image data transmission processing by generating and

transmitting image data on an original set (the scanner scans images on a document for

transmission, **See Col. 3, Line 43-46**), the operation unit enables a user to perform

interrupt copy start command operation so that whenever it is performed, it transmits the

interrupt copy start command information (user presses the interrupt key to start the

process, **See Col. 4, Line 62-66**), and the printer can be connected to a computer

(through the PC interface, **See Figure 1**) having a function of transmitting print job data

(**See Col. 3, Line 10-12**), wherein the printer includes a print execution means (the

device performs the function, thus it becomes the means) for forming an image on

paper based on print data in a predetermined format (**See Col. 3, Line 46-49**), print

data storage means and reception means (the device performs the function, thus it

becomes the means) for temporarily storing print data to be processed and receiving

print job data representing printed matter of several pages from the connected computer

(the image memory stores data supplied from the computer, **See Col. 4, Line 10-12**),

print job data processing means (the device performs the function, thus it becomes the

means) for generating the print data concerning the printed matter for each page and

storing the print data in the print data storage means (receiving the print data from the

computer, **See Col. 3, Line 57-59**, and storing it in the image memory, **See Col. 4, Line

10-11**), and copy control means (the device performs the function, thus it becomes the

means) capable of executing copy control processing of causing the image data supply

unit to start the image data transmission processing (operation unit is used to performs

setting and instruct the jobs, **See Col. 3, Line 26-31**), storing the print data responsive

to the image data transmitted as a result of the transmission processing (**See Col. 4,

Line 10-14**), and causing the print execution means to print based on the print data

(**See Col. 3, Line 46-49**), if the interrupt copy start command information is received

while the print job data processing means operates, the copy control means causes the

print job data processing means to interrupt the processing being executed and, as a

result, starts processing of waiting for a storage for executing the copy control

processing to be formed in the data storage means so that whenever available storage

area is formed, the print data being generated is interrupted and the copy control

processing starts (whenever the copy interrupt key is pressed, the image memory can

have sufficient amount to store the newly incoming data in order to prevent the data

from overflowing the memory, **See Col. 6, Line 3-29**), such that a user is enabled to set

a copy condition and transmit the information containing the copy condition information

as the interrupt copy start command information (user is able to set various settings

during the interruption for outputting the image data, **See Col. 3, Line 2-6**), the copy

control means of the printer calculates the available storage area for executing the copy

control processing based on the copy condition information included within the interrupt

start command information (once the data is accumulated in the image memory, **See

Col. 5, Line 40-42**, the memory is analyzed to see if the memory is less than the

predetermined volume, **See Col. 5, Line 42-44**, in order to execute printing when the

memory, which includes the print data, is below the predetermined volume as set by the

user beforehand, **See Col. 5, Line 27-31**), and the copy condition information can be

changed according to an operation performed by the user (the user is able to enter and

set instructions, data and other information, or cancel any changes made during the

interruption, **See Col. 3, Line 37-42**).

While Kataoka ('165) discloses that the copy control means of the printer

calculates the available storage area for executing the copy control processing based

on the copy condition information included within the interrupt start command

information, it fails to disclose calculating the memory capacity required for executing

the processing operation.

Simpson (Pub. # 20020066989) discloses calculating the memory capacity

required for executing the processing operation (calculating whether the printer has

sufficient memory for performing the job operation, **See Page 2, Paragraph 0019**).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include calculating the memory capacity required for executing the processing operation, such as the one disclosed within Simpson (Pub. # 20020066989), and incorporate it into the copy control means of the digital multiple function processing machine of Kataoka ('165) because it allows the machine to verify that it has the capacity to successfully execute the processing operation rather than not knowing and generating potential processing errors as a result.

Kataoka ('165) further does not disclose waiting for a sufficient available storage area prior to commencing the operation.

Beaudet ('795) discloses waiting for a sufficient available storage area prior to beginning the copying process (when the printer is in print mode and an interrupt button is pressed, it is determined when a sufficient memory is available for the scanned document in order to process the copy job, **See Col. 9, Line 61-Col. 10, Line 1**).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include determining when a sufficient storage is available, such as the one disclosed within Beaudet ('795), and incorporate it into the digital multiple function processing machine of Kataoka ('165) because it allows the data to be safely stored rather than deleting it if there is not an adequate amount of available storage space provided while interrupting the printing process.

Regarding claim 2, Kataoka ('165) discloses that the user is enabled to perform a print interrupt command as well as a copy start command operation as the interrupt copy start command operation (user is able to select the type of interrupt to perform,

See Col. 3, Line 2-5) so that whenever the user performs the print interrupt command operation, transmits print interrupt command information as the element information (**See Col. 6, Line 34-42**) and whenever the user performs the copy start command operation, transmits copy start command information as the element information (**See Col. 4, Line 62-67**) so that whenever the print interrupt command information is received while the print job data processing means operates, the copy control means of the printer causes the print job data processing means to interrupt the processing being executed whenever the copy start command information is received after the print interrupt command information is received and, as a result, starts processing of waiting for a storage for executing the copy control processing to be formed in the data storage means so that whenever available storage area is formed, the print data being generated is interrupted and the copy control processing starts (if the copy interrupt key is pressed during printing, **See Figure 2; Col. 5, Line 61-64**, the process is interrupted and copying takes place, **See Col. 6, Line 7-9**, with the image memory having sufficient storage for the incoming data, **See Col. 6, Line 27-29**).

Kataoka ('165) does not disclose waiting for a sufficient available storage area prior to commencing the operation.

Beaudet ('795) discloses waiting for a sufficient available storage area prior to beginning the copying process (when the printer is in print mode and an interrupt button is pressed, it is determined when a sufficient memory is available for the scanned document in order to process the copy job, **See Col. 9, Line 61-Col. 10, Line 1**).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include determining when sufficient storage is available, such as the one disclosed within Beaudet ('795), and incorporate it into the digital multiple function processing machine of Kataoka ('165) because it allows the data to be safely stored rather than deleting it if there is not an adequate amount of available storage space provided while interrupting the printing process.

Regarding claims 4-5, the rationale provided in the rejection of claims 1-2 is incorporated herein. In addition, the digital multiple function processing machine of claims 1-2 corresponds to the printer of claims 4-5 and performs the steps disclosed herein.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kataoka ('165) in view of Simpson (Pub. # 20020066989) and Beaudet ('795) as applied to claims 1 and 4, and further in view of Mishima ('056).

Regarding claim 7, Kataoka ('165) does not disclose that the printer calculates a required memory capacity based on copy description specification information, the printer calculates a predicted time when the available memory capacity reaches the required memory capacity, when the calculated predicted time exceeds a stipulated time which the user can set, insufficient memory notification information is transmitted, and when the calculated predicted time is equal to or less than the stipulated time and an elapsed time since an execution time of calculating the predicted time matches the predicted time, the copy control processing is executed.

Mishima ('056) discloses that the printer calculates a required memory based on the copy description information (calculates the print data capacity and the required free memory currently available to register the data in order to have it processed to be printed, **See Col. 17, Line 35-43**), calculate the predicted time when the available memory capacity reaches the required memory capacity (displays the time and the amount of memory available after each job is completed, **See Figure 24**, in order to determine when the data is able to be registered and copied, **See Col. 17, Line 44-48**), such that when the calculated predicted time exceeds a stipulated time which the user can set, insufficient memory notification information is transmitted (when the user tries to register a job, a notification is displayed that the memory is currently full, **See Figure 23**, since a real time value inputted exceeds a stipulated time, such as being sooner than what is displayed, **See Col. 17, Line 52-55**, for any existing memory that is currently available to be used, **See Col. 17, Line 16-18**), and when the calculated predicted time is equal to or less than the stipulated time and an elapsed time since an execution time of calculating the predicted time matches the predicted time, the copy control processing is executed (whenever a predicted time is available for the memory, the user is able to register a job with a stipulated time included, **See Figure 49**, so that once reserved, **See Figure 50**, the start time is able to be executed since it equals the predicted time set, **See Col. 17, Line 39-42**).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to include calculating the memory capacity needed, when the memory reaches the required capacity as well as when the calculated time exceeds,

meets or is less than the stipulated time, such as the one disclosed within Mishima

('056), and incorporate it into the digital multiple function processing machine of Kataoka

('165) because it allows the user to know whether the print data is able to be processed,

and if not immediately, when it can be processed so that an appropriate time is able to

be inputted for the job to be successfully processed.

Regarding claim 8, the rationale provided in the rejection of claim 7 is

incorporated herein. In addition, the digital multiple function processing machine of

claim 7 corresponds to the printer of claim 8 and performs the steps disclosed herein.

Response to Arguments

Applicant argues that the prior art does not disclose calculating the capacity of an

available storage area required for executing the copy control processing. Kataoka

discloses that the copy control means of the printer calculates the available storage

area for executing the copy control processing based on the copy condition information

included within the interrupt start command information, such that once the data is

accumulated in the image memory (**See Col. 5, Line 40-42**), the memory is analyzed to

see if the memory is less than the predetermined volume (**See Col. 5, Line 42-44**) in

order to execute printing when the memory, which includes the print data, is below the

predetermined volume as set by the user beforehand (**See Col. 5, Line 27-31**), but

Kataoka fails to disclose calculating the capacity of an available storage required for

executing the processing operation. Thus, the prior art of Simpson is used to meet the

disclosed limitation. Simpson discloses calculating the memory capacity required for

executing the processing operation, whereby it calculates whether the printer's memory

is sufficient for performing the job operation (**See Page 2, Paragraph 0019**). Thus, when combined with the copy control means disclosed within Kataoka, it allows the machine the ability to verify it has a sufficient amount of storage space to successfully execute the processing operation rather than not knowing, process the operation and potentially generate processing errors. As a result, the prior art of Simpson and Kataoka together does meet the above noted limitation within the claims.

The applicant also argues that the prior art does not disclose that the printer calculates a predicted time when the available memory capacity reaches the required memory capacity when the calculated predicted time exceeds a stipulated time which the user can set, insufficient memory notification information is transmitted, and when the calculated predicted time is equal to or less than the stipulated time and an elapsed time since an execution time of calculating the predicted time matches the predicted time, the copy control processing is executed. While, Kataoka does not disclose this limitation, the prior art of Mishima does. According to Mishima, a printer calculates a required memory based on the copy description information, such that it calculates the print data capacity and the required free memory currently available to register the data in order to have it processed to be printed (**See Col. 17, Line 35-43**), as well as calculates the predicted time when the available memory capacity reaches the required memory capacity by displaying the time and the amount of memory available after each job is completed (**See Figure 24**) in order to determine when the data is able to be registered and copied (**See Col. 17, Line 44-48**), such that when the calculated predicted time exceeds a stipulated time which the user can set, such as having the

time being sooner than was displayed **(See Col. 17, Line 52-55)**, insufficient memory notification information is transmitted, whereby when the user attempts to register a job, and a notification is displayed that the memory is currently full **(See Figure 23)** since a real time value inputted exceeds a stipulated time for any existing memory that is currently available to be used **(See Col. 17, Line 16-18)**. Thus, when combined with Kataoka, provides the user with the ability to know whether the print data is able to be processed, and if not immediately, when it can be processed so that an appropriate time is able to be inputted for the job to be successfully processed. As a result, the prior art of Mishima and Kataoka together does meet the above noted limitation within the claims.

Based on these facts, **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Rudolph whose telephone number is (571) 272-8243. The examiner can normally be reached on Monday through Friday 8 A.M. - 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vincent Rudolph
Examiner
Art Unit 2625

/Vincent Rudolph/
Examiner, Art Unit 2625

/David K Moore/
SPE AU 2625